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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/073,748 | 05/06/1998 | CRAIG DAVID WEISSMAN | 20308.702 | 1160 |
| 23639 | 7590 | 05/03/2006 | EXAMINER | |
| BINGHAM, MCCUTCHEN LLP THREE EMBARCADERO CENTER 18 FLOOR SAN FRANCISCO, CA 94111-4067 | | | COLBERT, ELLA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3624 | |

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/073,748

Applicant(s)

WEISSMAN ET AL.

Examiner

Ella Colbert

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 133,134,136-142,144-150 and 152-189 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 133,134,136-142,144-150 and 152-189 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 May 1998 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Claims 133, 134, 136-142, 144-150, and 152-189 are pending. Claims 133, 140-141, 144-149, 156, and 159-163 have been amended, claims 135, 143, and 151 have been cancelled, and claims 166-189 have been added in this communication filed 2/15/06 entered as Response After Non-Final Action.

Drawings

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings filed are informal and they are not in agreement with the Specification. The drawing figures 1 and 7-36 contain shading which needs to be removed for printing purposes. Figure 4, elements "481" and "491" are not found in the Specification in the description of Figure 4. Figure 2, labels element "204" as "Extraction Process" and the Specification references element "204" as "extraction and loading process 204". Figure 3, has the elements labeled different than what is referenced in the Specification on pages 25 and 26. For example, element "300" is labeled "Schema Definition 300" and the Specification references element "300" as "Schema Definitions"; element "312" is labeled "fact_agg_operator" and the Specification references element "312" as "fact aggregate operator"; and element "340" is labeled "agg_fact" and the Specification references element "340" as "aggregate fact". The element labels in figure 3 are not in agreement with what is referenced in the Specification. Figures 4-6 have a similar problem. Figure 5 element "500" is labeled "Runtime Schema" and in the Specification referenced as "runtime metadata 500" on page 55, lines 3 and 15.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "1310" and "1320" have both been used to designate "fact data semantic", "order fact table", and "fact table" and Figure 22 reference characters "2120" and "2210" have both been designated "SQL field". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 8, reference number "192"; Figure 9, reference number "192"; Figure 10, references numbers "192" and "900"; Figure 11, reference number "192"; Figure 12, referenced numbers "192", "900", and "1000"; Figure 13, reference number "192"; Figure 14, reference numbers "192" and "1300"; Figure 15, reference numbers "192", "1300", "1320" and "1330"; Figure 16, element reference numbers "192" and "1600"; Figure 17, reference number "192"; Figure 18, reference numbers "192" and "1700"; Figure 19, reference number "192"; Figure 20, reference number "192"; Figure 21,

reference number "192"; Figure 22, reference numbers "192" and "2100"; Figure 23, reference numbers "192", "2100", and "2200"; Figure 24, reference numbers "192" and "2100"; Figure 25, reference numbers "192", "2100", and "2410"; Figure 26, reference numbers "192", "2100", "2410", and "2500"; Figure 27, reference number "192"; Figure 28, reference numbers "192" and "2810"; Figure 29, reference number "192"; Figure 30, reference number "192"; Figure 31, reference numbers "192" and "3000"; Figure 32, reference numbers "182" and "184"; Figure 33, reference numbers "192" and "3000"; Figure 34, reference numbers "182" and "184"; Figure 35, reference numbers "192", "184", and "3500"; and Figure 36, reference numbers "182" and "184". Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a) because they fail to show elements "3010" and "3020" in Figure 30 and element "3100" in Figure 31 as described in the specification. Any structural detail that is essential for a proper understanding of

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the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Title of Invention

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The present title of the invention is redundant because the title recites as follows: "Method and Apparatus for Creating a Well-Formed Database System Using a Computer". It is presumed that when you recite "system" that a computer is used.

Specification

4. The Specification is objected to because of the following:

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they

should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

The Specification on the first page at the top should begin with "Method and Apparatus for Creating a Well-Formed Database System" then recite "Cross References to Related Applications". The Inventors names under the title of the invention are unnecessary. The "Cross References to Related Applications" should list each application number, title, and status of the application (pending, patent number, abandoned) and the file date. The bottom of each page of the Specification should only have the page number and nothing else. On pages 8 and 9, the Table of Contents

should be deleted and **Appendix A** should be at the top of the page as the last page after the Specification.

Page 18, line 13 recites "includes the schema definition 161 and ...". This line should recite "includes the schema definitions 161 and ...".

Correction is required. See MPEP § 608.01(b). A substitute specification is required pursuant to 37 CFR 1.125(a) because of the reasons stated above.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 133, 140, 141, 148, 149, 156, 163, and 166 are rejected under 35 U.S.C. 112, second paragraph.

Claim 133 recites the limitation "metadata system" in line 3; "extracting data" in line 11 and "semantic definitions" in line 14. Claim 140 recites the limitation "metadata system" in line 3, page 3. Claim 141 recites the limitations "metadata system" and "extracting data" on page 4 and on page 5 the limitation "semantic definitions"; Claim 148 recites the limitation "metadata system"; claim 149 recites the limitations "metadata system", "extracting data" and semantic definitions"; claim 156, recites the limitation "metadata system"; claim 163 recites the limitations "user instructions", "extracting data", and "semantic definitions"; and claim 166 recites the limitation "user instructions". There is insufficient antecedent basis for these limitations in the claim.

Conclusion

7. Claims 133, 140, 141, 148, 149, 156, 163, and 166 do not contain what the prior art Papierniak and Anand failed to teach according to the board decision on page 13. The board decision on page 13 states " Anand and Papierniak fails to teach a method where instructions for a metadata schema contain semantic definitions and where a business database system is automatically generated using those semantic definitions such that the business database system is well-formed". These are the reasons for allowance. This wording as stated needs to be incorporated into each of the independent claims. The Examiner does not find this exact wording in any of the independent claims as set forth above. Further, "claims 135, 140, 143, 148, 151, and 156 are deemed to be allowable over the prior art of record if rewritten in independent form including the reasons for allowance as worded above and including all of the limitations of the base claim and any intervening claims." Since claims 135, 143, and

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151 have been cancelled, the allowable subject matter needs to be incorporated into the independent claims 133, 140, 141, 148, 149, 156, 163, and 166 in order for the claims to be allowed.

Claims 133, 140, 141, 148, 149, 156, 163, and 166 are rejected and claims 137-139, 142, 144-147, 150, 152-155, 157-162, 164, 165, and 167-189 are also rejected because of their dependency on a rejected base claim.


Inquiries

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 571-272-6741. The examiner can normally be reached on Tuesday-Thursday, 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 571-272-6747. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 27, 2006


ELLA COLBERT
PRIMARY EXAMINER